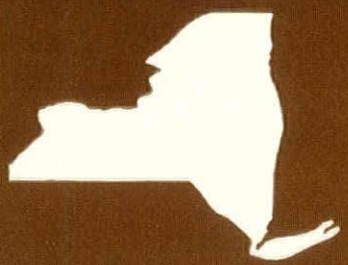
Empire State ARCHITECT



JULY-AUGUST 1943
VOLUME III NUMBER IV

Laying Pre-finished Maple Floor Sections

PREFABRICATED-DEMOUNTABLE STRUCTURES

by the thousand, constructed and delivered by the Johnson mill organization

40 War-Emergency Contracts

have included War and Navy Department Cantonments, Hospitals, Naval Training Stations, Farm Security Dormitories and War Workers' Housing under the Federal Housing Administration, State and Municipal Authorities.

Today we build for WAR . . . under direction of the U. S. Government . . .

Tomorrow we build for Peace . . . under direction of the Country's greatest Industrial Leaders.

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In addition to thousands of War-workers' homes, the Johnson mills have produced Demountable Administration Buildings, Field Offices, Barracks, Hutments, Farm-Workers' Houses, and Cafeteria and Canteens to serve over 17,800 Workers on a single job.

Today the Johnson mills are engaged in all-out production for Victory . . .

Tomorrow Johnson research will produce America's finest low-cost homes.

EXTRACT FROM RECENT NAVY DEPT. LETTER

"This work was started under difficulties that involved delays in acquisition of land, but was so well organized and expedited by the contractors that the 450 housing units were completed in 120 working days and the facilities, including pavements, sewage disposal, incinerators, fire protection and drainage system, were completed shortly thereafter.

"The job was organized on an assembly line basis that proved so efficient that the final costs, including the fixed fee for the contractors, was 11% under the original allotment."

Send for Brochure ESA-6

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JOHN A. JOHNSON CONTRACTING CORP.

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GENERAL CONTRACTORS

One of six 600-foot-long Drill Halls at largest Naval Training Station in the East. A recently completed $50,000,000.00 Project

SHREVE, LAMB and HARMON, ARCHITECTS

Empire State Architect

THE OFFICIAL PUBLICATION
THE NEW YORK STATE ASSOCIATION OF ARCHITECTS

July-August Issue—Vol. III, No. IV
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Publisher — Julian L. Kahle, 232 Anderson Place, Buffalo, New York.

ARCHITECTS IN INDUSTRY

The following article directs our attention to the varied activities of the profession in the all-out war effort. Many others from our ranks are likewise rendering invaluable service in the production field.

The profession is greatly interested in these activities, and the Editorial Board welcomes communications from you or your associates relating, within the bounds of military restrictions, the contribution which you are making to the defense program.

Since the outbreak of the present war, the Stow Manufacturing Company of Binghamton, New York, has obtained increasingly large orders for its product, flexible shafts, from the various branches of the military establishment of the Government. The company has been compelled to increase its facilities many times over. Conrad and Cummings, associated architects, of Binghamton, have been called upon at least a half dozen times to undertake commissions connected with this rapid expansion program. Finally, it became necessary for the company to locate and develop one or more branch factories. Apparently the officials of the company figured that it would be cheaper in the long run to put the architects on its own payroll and, consequently, made Mr. Conrad an offer of continuous employment as "Assistant Superintendent of Construction." He has become, for the duration or at least until the work of the firm requires his return to its office, a most important adjunct to the management of the Stow Manufacturing Company.

He not only has found, leased, altered and rehabilitated a factory building in a near-by community, but has assisted in engaging its personnel, installing its machines and placing it in operation as the first branch factory of the company. He has rented building space and altered it and equipped it for its current use as a company cafeteria and has leased near-by buildings and prepared them for office use for the expansion of the departments of management of the company. In the meantime there have been almost constant problems of shifting and enlarging departments of the plant and offices which he has been called upon to solve.

All in all, he has, within a short space of time, become one of the most valuable cogs in an industrial machine which is being constantly re-geared to an expanding war production program. This shows what a person with architectural training and background may do in developing maximum usefulness in the war effort. Life begins at thirty-eight in a job like that.

GEORGE BAIN CUMMINGS.

PLATT NEW VICE-PRESIDENT

As a result of the Letter Ballot Charles C. Platt, A.I.A., 221 West 57th Street, New York 19, N. Y., was elected Vice-President to replace Lorimer Rich, resigned.

WINSLOW AS NEW DIRECTOR

In accordance with information received under date of May 17th, 1943, by action of the Executive Committee of the Albany Chapter, A.I.A., Ralph E. Winslow has been named Director from this affiliate and Mr. August Lux has been named the Alternate.

EXPERIENCE SPEAKS . . . . . MILTON MILSTEIN

ARE ARCHITECTS ADAPTABLE TO ENGINEERING WORK?

(The following article is a first-hand observation by Milton Milstein, an architect employed for the past year by a sizable engineering organization in Buffalo, New York.)

The source of deepest concern to most architects for their present and future professional well-being is the cold disregard shown for their abilities by government agencies guiding the war effort, and the manner in which these same agencies have clasped to their hearts, a blood brother, the engineer.

Yes, the architect must admit that by and large, the engineer has been the "fair-haired boy" in planning structures for war production, and it is only natural for Architect to feel that he has been dispossessed. Why, in a time when men of training and experience in fields of building are sorely needed, should the architect do a fadeout in the public eye? Has the architect in a time of crisis calling for exertion of special skills, really proved to be unadapted to the vast work on hand? Has he truly been inadequately prepared to meet the challenge of a huge building program?

If we define the respective fields of work of architect and engineer in terms of peacetime building, we might say that architecture embraces a limitless variety of building types in which structural design often plays a subordinate part, and that engineering is more concerned with structural design than with planning problems. When we define the respective fields of work in terms of wartime building they remain much the same, but these fields narrow down considerably due to elimination of "non-essential types." Specialization in structural design assumes greater importance due to the nature of industrial building types such as, mills, plants, utilities, etc., required for war production. The need for structural design in steel, reinforced concrete and wood becomes dominant. And here is where the engineer who has restricted himself to the design of structures for which his specific training is suited, has assumed a definite leadership.

The government's attitude has been clear. With the exclusion of housing, the architectural profession has been considered ill-equipped, impractical, much too general, and absorbed with aesthetics, to fit the government needs for wartime building. Of course, there have been exceptions — but in the main the architect has been quasi-dispossessed. That is the *status quo* of the architect in wartime America.

The unfortunate by-product of this situation is a sudden feeling of competition between architect and engineer for which, in all fairness, we cannot blame the engineer. Because he has been recognized by the government for his role in the war effort, to the exclusion of the architect, the scope of his work has increased, and it is this expansion in endeavor which seems to cast the questionable shadow of coming events for the architectural profession.

The government's early appraisal of the profession, however, should be the important subject for controversy right now. If the responsible agencies have placed the emphasis on buildings of structural nature, and have chosen to select the engineer, just how has the architect measured up to the challenge? Has he shown that his training makes him adaptable to engineering work?

The facts on record indicate that the architectural profession has admirably fitted itself into the task of gearing the country for war. It has even shown willingness to subordinate itself to accomplish the important work on hand. In such varied roles as draftsmen, supervisors, superintendents, coordinators and expediters, architects have entered branches of work either forbidden or considered foreign to them, and have acquitted themselves admirably. In the instances where the profession has been assigned a definite job to be done in private practise, it has met the challenge. It has shown that in addition to defense housing, administrative buildings and military and naval training centers, the profession could successfully handle industrial buildings such as war plants, laboratories and utilities. It has shown imagination in conversions and in site planning. Let skeptics cull the pages of architectural publications for proof. Architects have even taken the lead in many wartime civic programs, which had originally been considered an engineering enterprise. To cite a specific example, in Buffalo, a group of architects recently met and solved the complex problem of civilian protection against air raids virtually single-handed, to the admiration of all civic authorities involved.

The success with which architects have directed their efforts in branches of engineering work is attributable to the background of the profession. Categorically:

1. The architect has been trained to think logically, as regards analysis and solution of any problem. This may be a problem of plan, materials or construction. Whatever, the case, he shows an intelligent approach.
2. Because he is conversant with general structural design in a broad sense, he shows an understanding of design in wood, steel, or concrete.
3. His experience in architectural detailing gives him a working point with which to approach engineering detail. His familiarity with the countless parts of a structure gained through experience with varied building types, gives him an enviable construction vocabulary beyond the grasp of the specialist.
4. His acquaintance with and understanding of the use of materials and equipment is indispensable in a time when limitations are imposed on their use, or when some are altogether unobtainable and substitutions must be made. Here his failure to display a working knowledge of special types of equipment should not be considered a blemish of his profession. It is as much a matter of supplementary education and experience for the engineer as it is for the architect.
5. A good general understanding of the mechanical trades, such as heating, ventilating, plumbing and electricity enables the architect to discuss these subjects intelligently with the engineer who specializes in these fields.
6. Often overlooked is the fact that many architects possess outstanding executive capacities. They have shown special aptitude for directing the efforts of technical groups. Their ability to make decisions, and their general knowledge of supervision in the field has hastened the execution of vital jobs on schedule.

It would be no pat on the back for the profession to assert that, on the whole, the architect has contributed his skills tellingly in the execution of countless projects for the war program. The fact that he has given what is needed under trying conditions is the final test and proof of his adaptability.

THE ARCHITECTS PAYMENT . . . R. CLIPSTON STURGIS, F. A. I. A.

Planning and constructing regardless of cost is easier and costs less in draughting than planning carefully for economy. On the commission basis the former is encouraged, and the latter is penalized. The more the work costs, the more is the architect paid. Every economy he makes for the owner reduces his own fee.

Quite apart from these obvious reasons for giving up a payment based on the cost, it is an undignified method of payment for the services of a professional man. No doctor or lawyer is paid on such a basis.

The basis of a fee and costs is:

First, the value of the professional service, and this can be really based on (a) the amount of personal service of the chief. Obviously domestic work will require more of this service than a commercial or a public building; (b) the length of the service, months or years; (c) the approximate cost as an index of the financial responsibility in the undertaking.

Second, the cost of rendering full architectural service, (a) drafting and overhead in the office; (b) service of engineers, civil, structural, domestic, etc., and (c) the cost of supervision outside that given by the office, *i. e.,* clerk of the works.

These two can be determined, the first definitely and the second estimated, and the owner will then have a complete estimate of the cost of the service.

The architect, after being given as full information as it possible in advance, can estimate the cost of the building, and he will naturally take pride in making these two estimates of the building and of the services, as accurate as he can, and will try his utmost to keep within them.

The architect and the owner have now a general survey of the whole; the cost of the building; the time for planning and execution; and the cost of service. Payment for service can then be arranged on a monthly basis.

Payments

(1) Twenty per cent of the fee is reserved for a final payment. This 20% is also used as a full payment to close the account, if for any reason (except the fault of the architect) the work is given up before completion.

(2) The 80% remainder is then divided into equal monthly payments covering the estimated time of the service, and on the first of each month this payment and the monthly draughting is paid. So that the architect, instead of waiting, perhaps six months, for his first payment is paid regularly every month from the start.

Take one or two examples to illustrate how this system is applied, The First National Bank of Boston. This was in 1906-07, and the estimated cost, to determine in part the salary, was $514,000. The salary was FIXED at $8,000 a year for two years, $16,000; the draughting ESTIMATED $15,000; engineers and clerk of the works estimated at $9,000. As against $514,000 the building cost $592,000. The work was completed within the two years.

The fixed fee remained	$16,000
Draughting (Estimated $15,000) was	15,218
Engineers and Clerk ($9,000) was	6,071
Estimated total $40,000 was	$37,289

It will be noted that the increase in cost of building did not increase either the fee or the other costs and that the estimated time of two years was kept.

Now take another bank, 1919 to 1922, The Federal Reserve. The building was estimated in 1919 at $2,000,000 to help fix the fee, and the fee was fixed at $20,000 a year for two years to two and a half years, *i. e.,* $40,000 to $50,000. Almost at once it was proved that the site already bought was inadequate and nearly a year was spent in examing other sites. The site finally bought was much larger and the estimated cost was $3,000,000. This did not affect the fee per annum but increased the length of service to three years. The final cost of the building was approximately $3,600,000, $250,000 of this extra was on the vaults. The architect did the furniture and interior decoration and again this was included in the fee, but involved more draughting so that eventually the total cost of building was approximately $4,200,000, and the services were:

Fee, 3 years	$ 60,000
Draughting	56,674
Engineers and Clerk of Works	100,100
	$216,774, Say

$217,000 on a cost of $4,200,000 or about 5%.

In contrast to this fee, the Housing done at Bridgeport, 1917-18, for the U. S. Housing Corporation cost between $4,000,000 and $5,000,000 and the fee there was $6,000 a year — a perfectly reasonable salary for designing fifteen or twenty units that were then duplicated.

Take now a commercial building — much simpler than a bank. Dorchester Telephone, 1920.

Estimated Cost $500,000. Actual Cost $584,000.

Fee	$12,500
Other Expenses:	
Draughting	8,212
Engineers	5,102
Incidentals	2,700
	$28,514

Here the architect's fee plus draughting was $20,000 or less than 4% and the whole cost of service was about 5%.

Domestic work is, of course, more expensive, for the architect's personal service is much more called upon and extends from the earliest sketch to the last detail of finish and includes much personal superintendence.

A house on Long Island built in 1925 was estimated at $80,000 but like many private houses it grew in scope and finish and finally cost $162,000, twice the original estimate. The $7,000 fee remained fixed and the draughting was approximately $5,000. This is 15% on the estimated cost but only 7% on the final cost.

Some office work which has carving and lettering will show a much higher percentage. A tablet erected on the Common in 1914 cost $3,073 and the fee was $250 and the draughting $336. So architectural service was about 20% on the cost.

Another gravestone cost $325; the fee and draughting $175.

No exorbitant fee was charged on either of these and yet it would have been a dead loss if charged on a 10% or even 15% basis, but the owner was perfectly satisfied to pay a reasonable fee for the architect's service and the actual cost of the service.

From my own experience extending over 20 to 25 years, I am convinced that this method of charging is logical, and perfectly fair to both owner and architect.

In the high brackets, work running into millions, the cost of service is well under the normal 6% and in the lower brackets, domestic work under $100,000 or small decorative items such as a Church Rood Screen or Choir Stalls, it would generally be over the usual 10% — but in all cases, the owner has felt that the fee, representing the net profit to the architect, was entirely reasonable.

One other point in connection with this system is of considerable value. When the fee is fixed 20% is reserved for a final payment, and this sum may also be used in case the service is abandoned. Here is a very fair and simple way of adjusting the amount to be paid if the work is abandoned. The paragraph covering this in the contract reads:

Continued on Page 14

MORE LUMBER THRU IMPROVED DRYING

By M. B. MOYER, M. E.

Consulting Engineer

Finished lumber, substituted for steel because of war requirements, has become a material of very critical status, the demand for which now exceeds the supply. A shortage of drying facilities is one serious bottleneck in the production of finished lumber.

Two questions present themselves:

a. Can the present technique of drying lumber be safely shortened?

b. Can new processes which will save time and improve the quality be introduced?

Wood is a cellular structure whose cross sectional pattern when viewed microscopically resembles a minute honey comb. Apparently the wall of each cell is composed of spirally wound fibrils, in a pattern like the lay of small wires which compose a bridge cable.

Tiny voids between these fibrils are normally filled with sap water. As drying proceeds, the central cavity is first drained after which the water in the fibril voids begins to drain out. This brings the fibrils closer to each other and shrinkage of the wood starts.

In addition to the longitudinal rows of cells there are periodic rows of medullary or "pith" rays which radiate from the heart to the bark of the log. These contain thousands of little cells whose major axes lie at right angles to the center line of the log.

Drying removes the sap which contains dilute solutions of sugars in the sap wood and tannins, with organic coloring matter, in the heart wood. The departing moisture must pass through these cell walls, to the outer surface, in the process of drying.

The present practice of placing a load of lumber in an air tight compartment where it is alternately steamed, heated and dessicated, applies heat energy to the surface to obtain internal reactions. When heat is thus applied, it must be more intense at the surface to penetrate. In drying, the outside is affected sooner than the inside to induce the migration of the moisture held within. This method of applying the drying energy must be applied to each board uniformly throughout its length.

Obviously where twenty-five or thirty layers of boards resting on cross stickers are treated simultaneously by subjecting the entire pile to an envelope of steam or a drying atmosphere, the boards along the outside of the pile tend to be acted upon before those deeper within.

The operator places several pieces of wood at strategic points in the pile, so that he can remove them from time to time for observation and testing. The varying states of these samples guide the progress of the entire drying operation. If samples in one part of the kiln are drying ahead of the others, the operator must retard the flow of air or intensity of heat in this zone. Local steaming or water spraying may be resorted to as needed.

Dry kilns are designed in a variety of ways. The older ones employ a series of pipe coils stretched underneath the entire length of the kiln for their source of heat. Some introduce steam by means of a perforated pipe running along the sides of the kilns. Others employ steam jet aspirators to induce a circulation of air while steaming. A series of flues built into the side walls extend from the floor to the roof, where they are capped with individual roof ventilators. Such kilns are classified as "Gravity Type".

Another sort of kiln employs power driven fans, using reversing dampers or reversing drives (where propellor type of fans are employed) to induce surrounding steam or humidified atmosphere to enter the pile of boards from one direction or the other to offset the tendency of the outside boards to dry first.

Some kilns follow the steaming and heating cycles with the passage of the humid air over water cooled pipe coils to dehumidify by condensation.

Another type of kiln employs sprays of water heated to desired dew point temperatures to impel the air flow. Gradual lowering of the temperature of this spray water will slowly bring the atmosphere of the kiln below its dew point and extract the moisture from the air in step with the speed of drying of the lumber itself.

Where a saw mill is working on a single variety of lumber the "Progressive Kiln" finds favor. Cars of green lumber from the saws are pushed through the long tunnel like structure in which the various operations of steaming, heating and desiccating are taking place at appropriate points. As each car of dried lumber is taken from the exit a new car of green lumber is introduced.

The "Compartment Kiln" with a space or series of spaces each accommodating two or three kiln cars, can be operated at full capacity or partially so, in accordance with the demand. It is of especial value in a furniture factory where a variety of species of wood will require differing drying schedules, for simultaneous deliveries.

All modern kilns employ automatic means for maintaining scheduled temperatures and humidities. The operator is guided by a predetermined drying schedule. A set of recording thermometers and hygrometers accurately chart what conditions have been maintained in the kiln, and reveal what the present conditions are.

The skill of the operator means much. One man has remarked "I would rather have a good operator working on a poor kiln than to have a poor operator working on a good kiln."

This "skill" shows its value when shrinkage starts. It must be kept uniform throughout the length of the board. Failure to do this induces "cupping", "twisting", "checking" and "honeycombing", all of which are primarily due to "case hardening". This is a condition where the surface fibres have dried and hardened more rapidly than those in the core of the piece. Tensile stresses are set up in the surface while the core cells are subjected to crushing compression stresses.

It seems unlikely that the time of drying, with present day equipment can be shortened. However in drying certain other materials, the use of near infra red light rays has saved much time. Likewise the use of high frequency energy applied in veneer drying is a commercial success reducing time and improving the product.

Since both of these media apply their energy to the interior of objects dried there is no surface drying to be contended with.

If the sap and fibre moisture can be expelled by internal friction induced by rapidly changing states of internal fibre stresses, similar to the familiar heating induced by bending a wire back and forth, the defects listed above cannot occur.

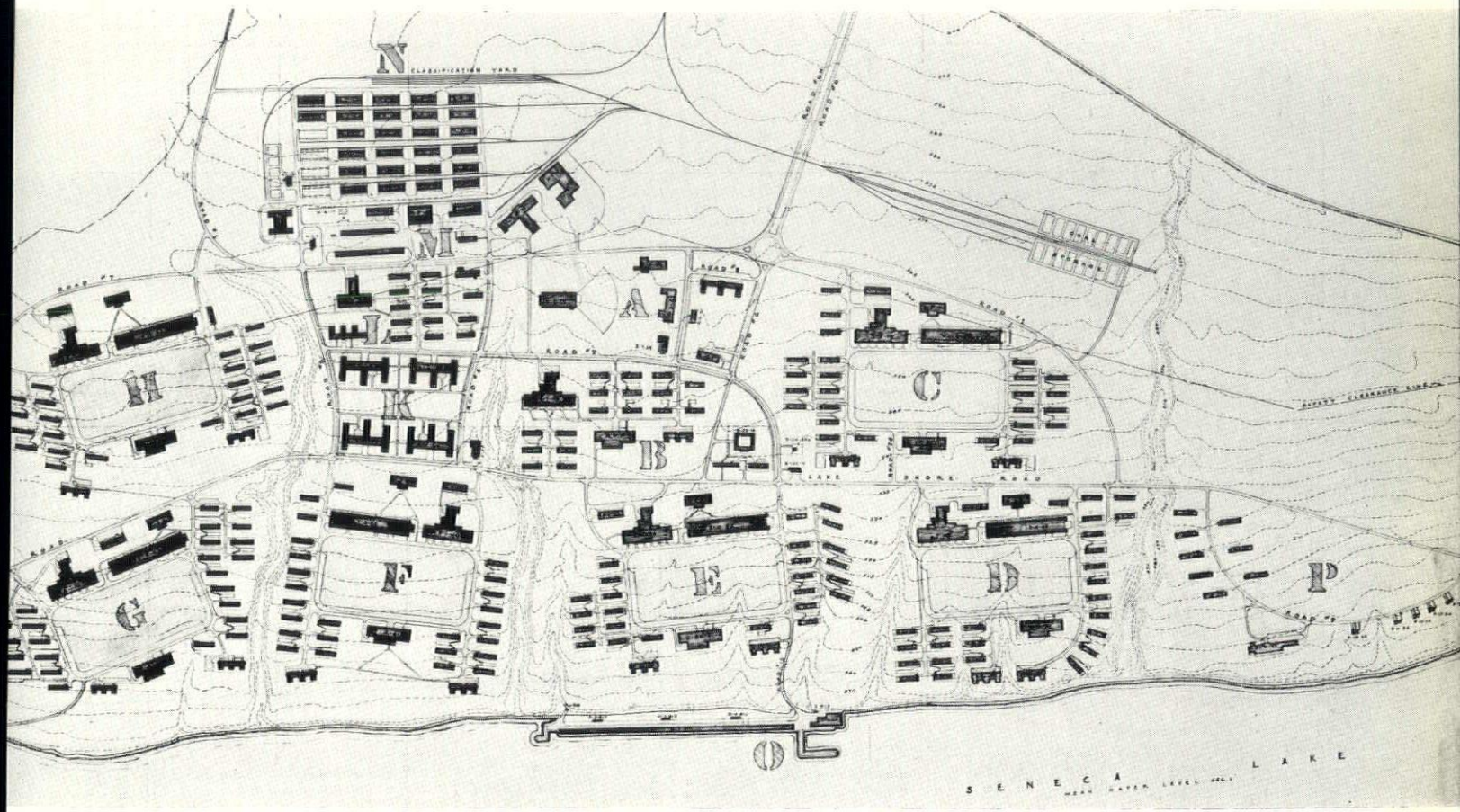
Men now at work along these lines have already achieved sufficient success to justify the hope that before long we may have more and better lumber from the present sawing and planing equipment.

SAMPSON NAVAL TRAINING STATION

SHREVE, LAMB AND HARMON, *Architects*

GILMORE D. CLARKE
Engineer

MALCOM PIRNIE
Engineer



GENERAL PLAN OF TRAINING AREA

The Civilian Housing adjoins this area on the south and the Hospital is at the extreme southerly end of the station.

A	—Administration	K	—Schools	N	—Warehouses
B	—Station Personnel	L	—Outgoing Group	O	—Boat Training
C to H	—5000-men training groups	M	—Utilities	P	Officers Housing

The U. S. Naval Training Station at Sampson, N. Y. was built under the direction of the Bureau of Yards and Docks, represented by the Officer-in-Charge of Construction, Captain J. C. Gebhard, and later, when this officer's assignment was changed, by Captain W. W. Schneider. Located on Lake Seneca about 12 miles south of Geneva, N. Y., it is built upon a 4½ mile stretch of farm land paralleling the Lehigh Valley Railroad and extending about a mile from the easterly shore of the lake.

This terrain, about 2550 acres in area, is divided into three main sections: The Training Station, the Civilian Housing and the 1500-Bed Hospital.

THE TRAINING STATION

As shown by the plan, the major units are the six training groups "C" to "H" with quarters for 5000 men each, consisting of barracks, mess hall, drill hall, ship's service, rifle range and other appurtenant buildings surrounding a large sodded drill field 600 feet by 1200 feet. Most of the training, except for advanced trainees and for boat drills, is done in these areas, which also provide the group recreational facilities.

A spur from the railroad brings supplies and equipment directly to the Warehouse Group, "N", and to the Utility Group, "M", which includes the Cold Storage, Bakery, Laundry, Central Heating Plant for the area and other service buildings. It also serves the incoming and outgoing trainees and those on "shore leave".

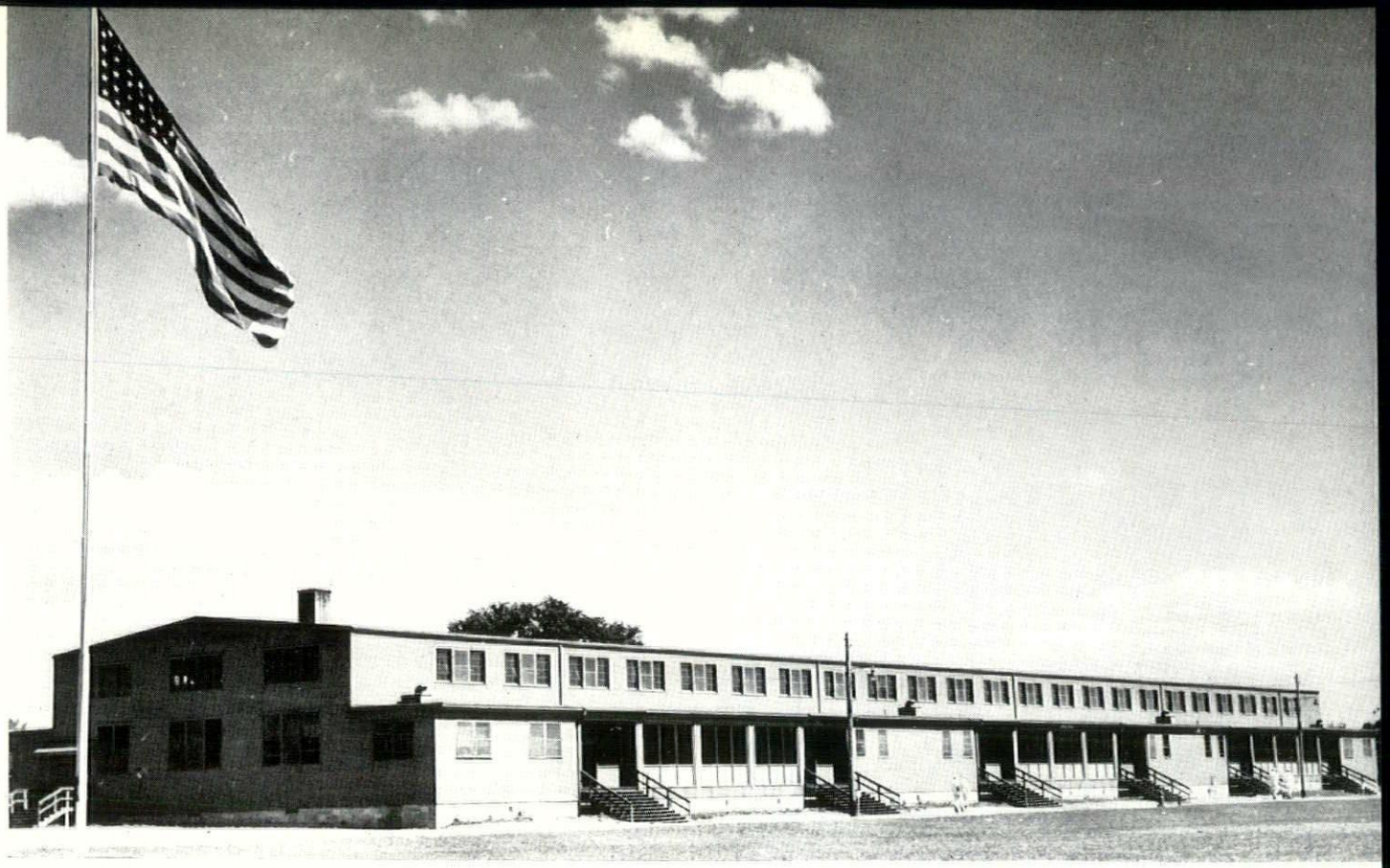
Centrally located in the plan are the Administration Group, "A", at the main entrance to the Station, the Station personnel, "B", the Schools, "K", where advanced training in technical subjects is given, and the Outgoing Group, "L", where men who have finished their courses are held for assignment to their stations.

On the shore of the lake is the boat training unit, "O". This consists of a dock and a shelter 2000 feet long for 150 whale boats and a small basin for 10 fifty-foot motor boats. A boat repair building complete with gantry crane and repair facilities adjoins this basin.

The Station proper consists of nearly 400 buildings of which there are more than 60 different types.

CIVILIAN HOUSING

This group, consisting of dormitories and mess facilities for 100 men and 150 women and row housing for 300 families, adjoins the Training Station to the south and is not shown on the plan.



U. S. NAVY OFFICIAL PHOTO.

TRAINING GROUP MESS HALL FOR 5000 M

HOSPITAL

At the extreme southerly end of the area is the 1500-bed hospital comprising, besides ward buildings of various types for 1500 patients, the administration building, accommodations for nurses, service detachment doctors, the hospital mess, central heating plant, laundry and other buildings making up the service group. In all there are 82 buildings in this group.

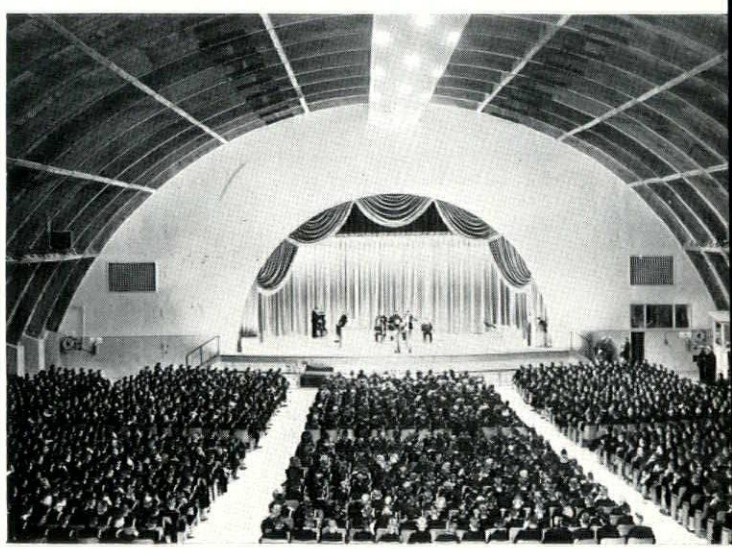
UTILITIES

Water is taken directly from the lake by means of a 20-inch intake 1800 feet out into the lake and 80 feet below the surface. The pumping station at the short end of this intake with a capacity of five million gallons per day houses five electric pumps and two standby units powered by gasoline engines. The arterial system is divided into two high pressure lines which serve the higher terrain and the hospital area, and two low pressure lines directly connected to a two million gallon reservoir on high ground located at the opposite end of the Training Station from the pumping station. This reservoir floats on the line as an equalizer of hourly fluctuations in flow and as a reserve fire fighting supply. An automatic booster pumping station drawing water from the reservoir connection furnishes make-up water to the high service lines between the Training Station and hospital during periods of maximum demand, or releases surplus high service water to the reservoir to maintain high service pressure within desired limits.

The sewage is disposed of by a gravity system at a centrally located disposal plant with a capacity based on a population of 40,000 and designed for 75 gallons per capita per 24-hour day. As the effluent is returned to the lake about two and a half miles south of the water supply intake, gravity flow is provided to insure treatment of the sewage during possible periods of power failure, and the effluent discharges into the lake through an out-fall line about 1400 feet long with the outlet about 40 feet below the lake surface.

Temporary electric power was obtained by means of an extension of a line serving the Ordnance Depot adjoining the Station to the east which gave a maximum service of 2500 KVA. This line still serves as an emergency standby. The permanent 6000 KVA current is obtained from the steam electric generating plant at Dresden, 3½ miles directly across the lake, by means of sub-marine cables and is distributed throughout the Station at 4800 volts being stepped down by local pole transformers as required.

Of the 58 miles of roads required for the Station, the existing roads were, in so far as possible, retained in the



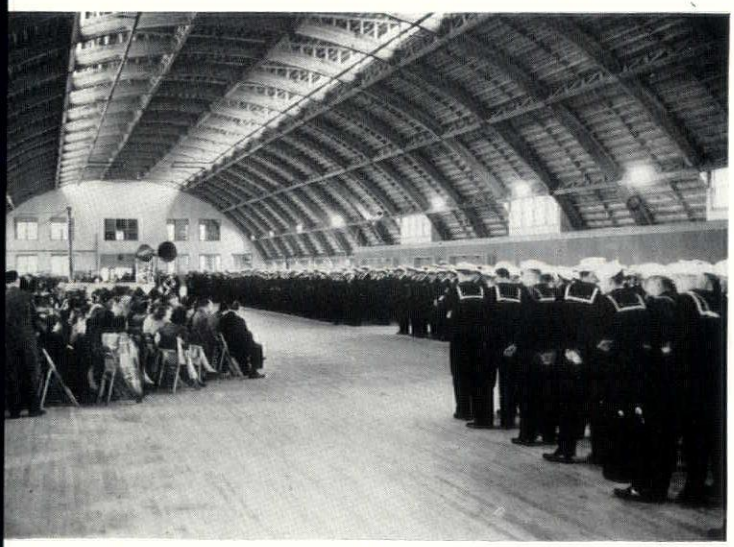
U. S. NAVY OFFICIAL PHOTO.

INTERIOR OF AUDITORIU

HALL—600 ft. x 120 ft. THERE IS ONE OF THESE IN EACH TRAINING GROUP. *U. S. NAVY OFFICIAL PHOTO.*

plan and widened and resurfaced as required. The new roads and parking areas are built mainly with a gravel base and a hot lay tar surface. Owing to the clayey nature of the ground, it was necessary to provide a complete system of drainage ditches, culverts and catch basins to take care of the surface run-off.

The speed at which the Station had to be built required the greatest possible efficiency of organization, as well as judgment in the selection of those materials procurable in the shortest possible time. With few exceptions, the buildings are of wood and designed for lengths and sizes which could be quickly obtained. Critical materials wherever possible were avoided and where not, they were reduced to a minimum. Various substitutions were permitted such as the use of concrete or terra cotta block for foundations as the available supply or the capacity of the block plant warranted. A few pertinent dates will show the tempo at which the work progressed:



RIOR OF DRILL HALL SHOW- 20 FOOT SPAN LAMINATED WOOD ARCH. *U. S. NAVY OFFICIAL PHOTO.*

May 14, 1942—Site approved by the President.

May 25, 1942—Organization meeting at Architects' offices with Officer-in-Charge of Construction, the Architects, the Engineers and the Contractors.

May 26, 1942—Temporary quarters opened in Geneva and topographical surveys started immediately thereafter while work commenced in the New York offices of the Architects and the Engineers.

June 1, 1942—Site operations started.

June 15-23, 1942—Temporary buildings at the site for the Navy, the Architect-Engineer and the Contractors completed and occupied.

August 15, 1942—Permanent station Officer Personnel began to arrive.

September 15, 1942—First group "F" substantially complete and first trainees arrived.

October 17, 1942—Group "F" complete and taken over by the Navy with appropriate ceremonies.

December 31, 1942—Work substantially complete.

It would not have been possible to have completed this "city" for 35,000 men in seven months without the utmost devotion of those responsible for the success of the operation and their complete and constant cooperation. Decisions by the Officer-in-Charge had to be and were made as quickly as possible and the drawings and other documents for the great number of structures and utilities were prepared with the utmost speed and care.

LETTERS

AN ENGINEER'S REPLY

In the April issue of our publication, Mr. George A. Boehm suggested the amalgamation of architects and engineers into one organization, with one license, and quickly made off to a nearby bomb shelter to avoid the anticipated on-rushing of bricks.

Having privately practiced both professions concurrently for more than twenty years I suspect that Mr. Boehm fears for the profession in that he is grabbing at straws to make our position more secure.

We are living in an age of specialization. During the Renaissance there were numerous examples of combination architect-engineer-painter-sculptor-scientist. Scientific development, however, forced the breaking up of the combination callings either as architects or engineers, painters or sculptors, in order to develop beyond the stage of mediocrity. The various callings, in turn, were resolved into further subdivisions, so that, while we once had Civil Engineers as differentiated from Military Engineers, we have today definite classified engineers with their separate courses and separate callings as, Civil, Mechanical, Electrical, Chemical, Mining and Ceramic Engineers.

Taking the civil engineering field alone and breaking it down to its branches we find Structural, Hydraulic, Sanitary and Railroad Engineers, which in their turn are further specialized, so that a Structural Engineer becomes a specialist in either foundations, concrete, steel, wood, etc., and even these specialists are only worth their salt if they concentrate on one type of problem. The same applies to Mechanical, Electrical and other branches of engineering, and even to Architecture.

Whom then shall the architects take as bedfellows? The Sanitary Engineers? There is a sanitary problem in a building. The Mechanical Engineers? There is heating and ventilating to be sure. Or shall it be the Ceramic Engineers, because there is tile in a structure?

The Architects, I think, would fare best to leave the Engineers strictly alone and concentrate on the organization of the Architectural profession into a powerful Building Planning Council, in which all groups who take part in the design of the building should belong as a sort of a clearing house, while individually belonging to their own professional societies.

An organization, in order to succeed, must consist of a group of individuals having the same problems and speaking the same language, and a sanitary engineer (as an example) is better understood by a Public Health physician than he is by an architect; and the mere fact that occasionally a structural or an electrical or a ventilating engineer collaborates with an architect on a project is no more reason for amalgamation into one organization than there would be in joining up with manufacturers simply because they co-operate with Architects in the preparation of detailed plans.

The engineers recognized the fact and formed societies of specialists, even though all belong to an Engineering Foundation; the Architects, likewise, ought to make similar specialists' societies though all belonging to the Building Planning Council, and thus have a horizontal instead of a vertical organization.

Fraternally yours,

A. H. Okun.

LETTERS

June 18, 1943.

Editorial Board,
Empire State Architect,
606 City Bank Bldg.,
Syracuse, N. Y.
Dear Sirs:

I saw in your May-June issue, an article on "PREFABRICATION", by Harold R. Sleeper — implying that the real complete prefabrication and factory assembly of substantial, modern houses — would be unsolvable.

The writer feels compelled to reply thereto and hope you will publish, that Mr. Sleeper's assumption is erroneous. The question of complete prefabrication and factory assembly of substantial houses, in a manner to be readily transportable, intact, without demounting, without dismantling the improvements within the house — is not only solvable, but have been solved by the writer.

This invention was offered to the War Department, and other Housing Authorities in Washington, D. C. — during 1940-41 — to solve the temporary Defense Housing and Army Cantonment problems. Unfortunately, the AUTHORITIES take the attitude, that they desire nothing new. New inventions must be sold to some large, prominent firm, who is already doing Government jobs and be utilized by such firms. A Patent has been applied thereon and the invention is now tied up in litigation — because the Commissioner of Patents claims, that he would have a right to ignore his own published rules; declare any inventor in default and defraud the inventor of his invention.

Of course, the writer would deem it UNWISE, to disclose too much of the technical aspects and as for its ECONOMIC ANGLE, its manufacture would require a space of 100 or more acres — on a navigable water front and a land road of not less than 100 feet in width. The volume of production would be the most economical at 50 buildings per day, (15,000 per year) and the shipment of houses would start on its way — almost as fast as they come off the assembly line. A delivery crew of 14 persons would set the building on its site from one-half an hour to one hour or a delivery crew of 8 persons in one to two hours, exclusive of excavation and refilling if any. In order to extract the building from the site and transfer same into its moving vehicle, without demounting, without dismantling the improvements within the house, would require 2 hours for a delivery crew of 8, exclusive of any possible excavation around the building. The speed of transportation would be about 10 miles per hour. Roads up to 15 degree angles and irregularities may be utilized. These houses could be also readily transported by water.

On the site, these buildings would be solidly WELDED TO THE SITE, and would in all respect equal to and could not be distinguished from ordinary site erected houses OF NORMAL LAYOUT and appearance.

These houses will be on the market, at an early date, provided the U. S. Patent Office will honor its own published rules — and give the rules A MEANING that would be attributed to them by an average American citizen when he reads it.

Respectfully submitted,

JOHN C. BURT,
Architect.

LEGISLATION

A summary of Post-War Planning Law as it effects the Architectural Profession.

This law among other things specifically appropriates $3,000,000, $100,000 of which is for administrative purposes and $2,900,000 for the preparation of plans for post-war public improvements. This may be expended in part by recognized authorities, government bureaus, and for the employment of private architects and engineers directly. The architectural fees established are 2% for preliminary plans, and an additional 2% for working drawings and specifications plus the cost of test borings and other extraordinary expenditures. Where the State advances the money, the division between the State and the authority, bureau, municipality, school district, or district corporation will be half and half, in other words 1% will be advanced for preliminary plans and 2% for detailed plans and specifications.

The State Post-War Public Works Planning Commission has prepared a booklet covering the projects recommended to date, which is available upon request. As of this writing, the Commission has not been completely constituted. In fact, State Budget Director Burton has been the only appointee thus far. Upon the completion of the Commission's personnel, architects interested in government work may advance their interests, each in his own way.

The Executive Secretary of the Commission is Holden A. Evans, Jr., State Office Building, Albany, New York, to whom inquiries may be addressed at any time.

CHARLES C. PLATT, *Chairman,*
Committee on Legislation.

ANNOUNCEMENT

OPPORTUNITIES WITH THE STATE GOVERNMENT

Pursuant to a suggestion from Charles C. Platt, Chairman of the Legislative Committee of the State Association, a communication was addressed to Governor Thomas E. Dewey:

"Will you kindly advise us regarding the availability in your estimation of the architectural profession for posts in the Labor Department and in the Housing Division. We believe that the modern architect with his executive ability and keen sense of practical values should prove a valuable addition to the ranks of government officials."

Under date of April 23rd, Mr. Paul E. Lockwood, Secretary to the Governor replied:

"On behalf of Governor Dewey I acknowledge your letter of April 15th. I assume you mean that it might be well for architects to be appointed to positions in the Department of Labor and the Division of Housing in which their professional training and skill could be extremely useful.

On behalf of the Governor I thank you for the suggestion and want you to know that it will receive careful consideration."

During these days of curtailment in the building industry, architects desiring some such post might well use this information as an introduction for their own personal efforts at such quarters as may have some influential relationship.

Charles Rockwell Ellis.

ARCHITECTS PAYMENT

Continued from Page 5

"The architect shall receive salary for the period of his services only, but, if the work is abandoned and the employment of the architect consequently terminated, he shall be paid in addition to the $—— a month, the further sum of $——" (*i. e.*, the reserved 20% of the total fee.)

There are certain obvious advantages to this system for the architect:

(1) No work is ever done which does not show a definite profit.

(2) Payments both on account of the fee and the current draughting and overhead are paid every month.

(3) The architect is encouraged to put all his professional skill at the disposition of his client to arrive at economical planning and construction. Five hundred spent in draughting might easily save five thousand.

(4) The architect is freed from the onus of receiving more pay if the owner deliberately increases the cost by the use of more costly material, involving no work on the architect's part.

The one great advantage for the owner is that the architect, having no financial interest in the cost, can put all his time and skill on his professional service and on studying for economy for the owner.

The one great disadvantage which has hitherto hindered its adoption is that the architect does not make abnormal profit on the big job — those over a million. In the large city offices, the profit on a three million job would enable an architect to do domestic work on a 10% basis and lose money. This would often keep an influential client.

On the whole, the advantages far outweigh these disadvantages and it gives the architect true professional standing.

LETTER

Empire State Architect,
c/o Editorial Board,
606 City Bank Building,
Syracuse, New York.
Gentlemen:

The writer read with interest your report on the Annual Meeting of the A.I.A. held in Cincinnati the latter part of May, but was disappointed in seeing no mention made of any activity by your society looking towards resumption of building throughout the country, now under Government ban.

In the June issue of the Architectural Forum it was stated that the Government's immense building project was rapidly nearing the end and that work was being suspended on all projects that could not be completed before September 1st, if I remember correctly.

The question naturally arises as to what the unemployed building mechanic is going to do after what little building there now is, ceases. The great majority of these men are middle-aged and certainly are too old for military service. On the other hand they will not, in the writer's opinion, be welcomed by employers who are advertising for help in their war plants. These employers are chiefly interested in securing women workers, or if they can find a reasonably young man whom they think is draft exempt they may be willing to employ him; but it seems certain to the writer that within a very short period practically all building mechanics except a small percentage employed on housing operations, will be out of work.

Now is the time for organizations like the American Society of Architects to take the lead in bringing about a relaxing of the Government ban on certain types of buildings. Of course it is too much to expect that there will be any general removal of the ban, but why continue to build frame additions to hospitals located in thickly populated communities instead of permanent construction? In the past the explanation has been that wood is cheaper than masonry but now that lumber has fallen into the "critical materials" classification why continue to use lumber when brick and tile are so plentiful and when mason labor is also abundant?

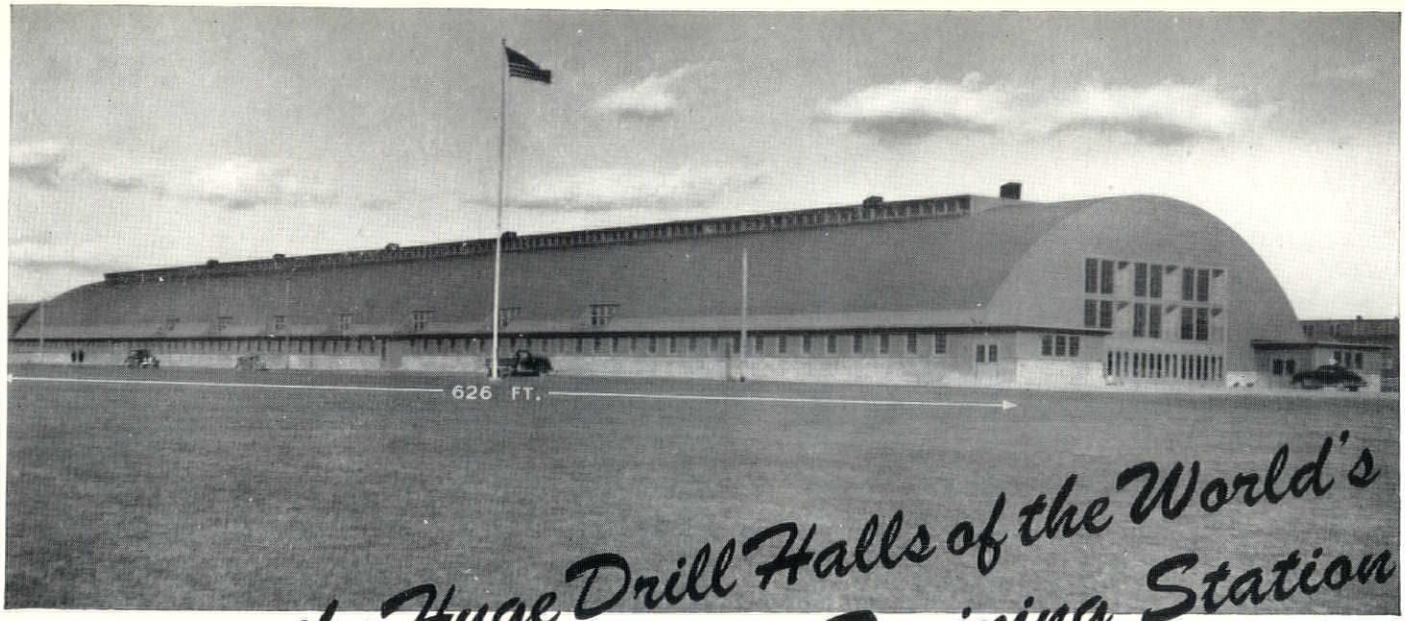
Outside of structural steel, the amount of critical materials used in temporary hospitals is practically the same as in permanent buildings and it does seem that sufficient structural steel could be spared to allow the immediate resumption of building of hospitals which are so urgently needed.

The writer lives in Newark, New Jersey, and about ten days ago a boy about ten years old, was taken suddenly ill. The physician stated that an immediate operation was necessary for removal of the appendix. It is stated that the family telephoned all hospitals in Newark and none of them would accept him; finally space was secured in a hospital in an adjoining city. Practically every hospital in this section is crowded far beyond its normal capacity, and it is sometimes extremely difficult for an expectant mother to find any hospital to which she can be admitted when her time comes.

I therefore feel that there should be an immediate removal of the ban on the building of permanent type hospitals, at least in thickly populated sections of the country, particularly as private money is waiting in many cases for the construction of such buildings; or at least private capital will pay a large portion of such expense.

The writer hopes that the architects of New York State will take the lead in this movement.

Yours very truly,
THE BELDEN-STARK BRICK CORPORATION,
EDWIN F. KNIGHT,
Vice-President.



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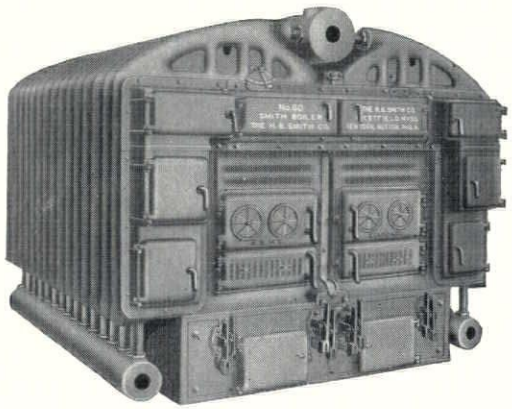

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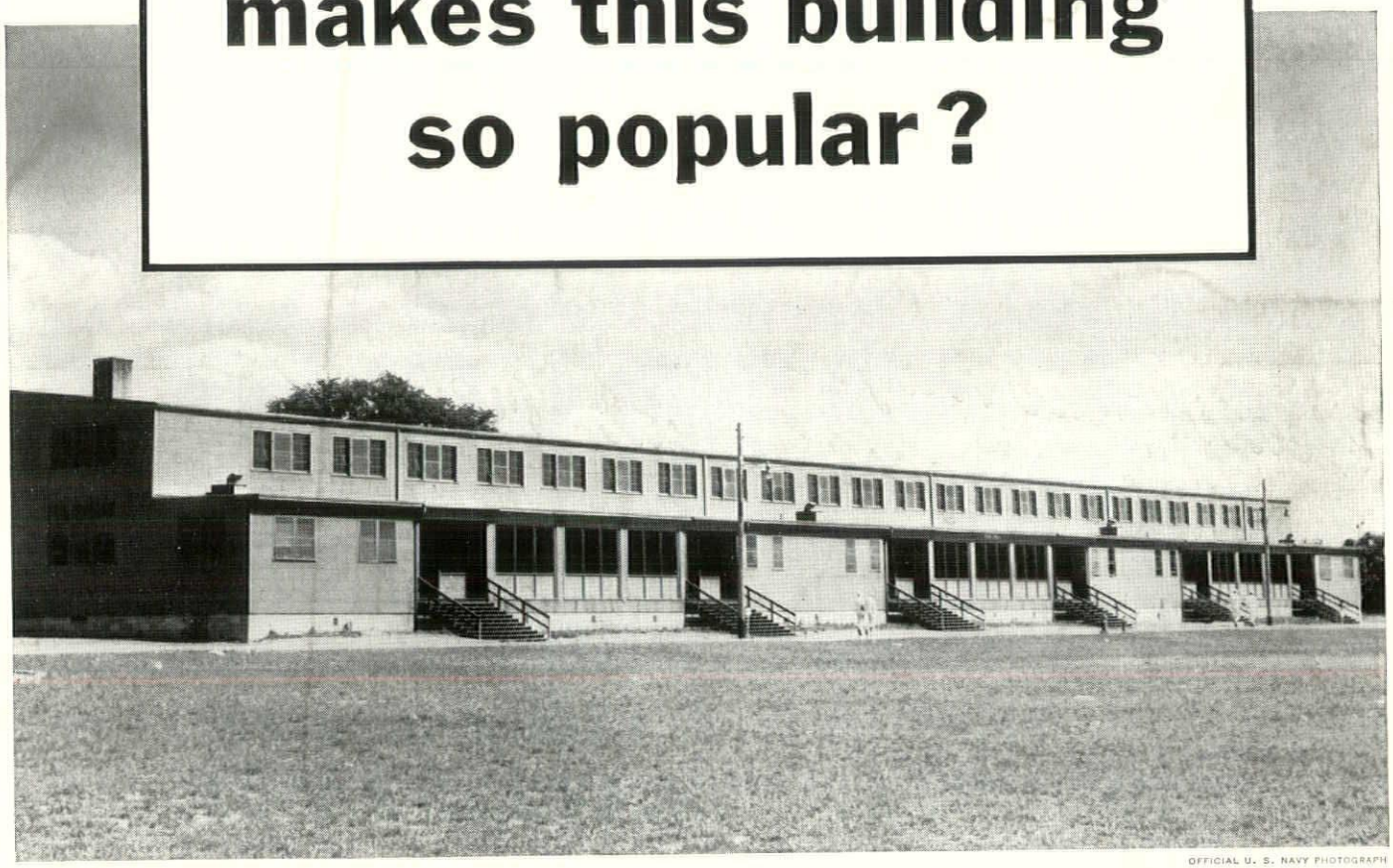

OFFICIAL U. S. NAVY PHOTOGRAPH

Shreve, Lamb & Harmon, Architects — John A. Johnson Contracting Corp. and Mount Vernon Construction Co., General Contractors — J. L. Murphy, Inc., Sub-contractors

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